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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/647,482	08/25/2003	Stephan Michael Vetter	DP-308886	2365
22851	7590	03/22/2005	EXAMINER	
DELPHI TECHNOLOGIES, INC.			CHIESA, RICHARD L	
M/C 480-410-202			ART UNIT	PAPER NUMBER
PO BOX 5052			1724	
TROY, MI 48007				

DATE MAILED: 03/22/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/647,482

Applicant(s)

VETTER ET AL.

Examiner

Richard L. Chiesa

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-33 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-33 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 August 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Drawings

1. The drawings filed on August 25, 2003 are accepted by the examiner.

Specification

2. The disclosure is objected to because the word --has-- should apparently be inserted between "media" and "an" in the eighth line of paragraph [0008] on page 3 of the specification. Appropriate correction is required.

Claim Rejections - 35 USC § 102/103

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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5. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicants are advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

6. Claims 17, 19, and 23 are rejected under 35 U.S.C. 102(a) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over U.S. Patent No. 6,527,834 to Jorder et al. Jorder et al disclose a non-pleated, non-woven air filter media with a conductive coating (note col. 1, line 5 to col. 2, line 17, and col. 3, lines 1-42) as claimed (35 USC 102a). It would appear that Jorder et al may not explicitly state that charge is dissipated. However, Jorder et al do disclose that an antistatic finish is produced for the purpose of reducing explosions (note col. 2, lines 5, 6). Consequently, it is inherent or at least would have been obvious to one having ordinary skill in the art (35 USC 103a) that Jorder et al's conductive coating dissipates charges.

7. Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Jorder et al in view of U.S. Patent No. 6,790,259 to Rittri et al. Jorder et al, as described above in paragraph 6, disclose a filter substantially as claimed. However, Jorder et al may not disclose that the filter is an electret. In any case, Rittri et al (note col. 1, lines 10-25) teach the well-known use of an electret filter in an air filtration apparatus for the purpose of maximizing an electric field.

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Therefore, it would have been obvious to one of ordinary skill in the art to employ an electret filter in the Jorder et al air filtration system in order to maximize the electric field as taught by Rittri et al.

8. Claims 1-3, 6, and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rittri et al in view of Jorder et al. Rittri et al (note col. 1, line 10 to col. 3, line 3) disclose a portable filter apparatus with a fan (col. 2, lines 63-65), an ionizer 3, pleated electret filter 2, and conductive grounded dissipative grid 6 just upstream of the filter substantially as claimed. It would appear that Rittri et al may not disclose the use of a conductive coating instead of the conductive grid. In any case, Jorder et al (note col. 1, line 5 to col. 2, line 17, and col. 3, lines 1-42) teach the well-known use of a conductive coating instead of a conductive grid in a filter for the purpose of reducing explosions. Consequently, it would have been obvious to one of ordinary skill in the art to employ a conductive coating rather than a conductive grid in the Rittri et al filter in order to further reduce the danger of explosions as taught by Jorder et al.

9. Claims 1-3, 6, and 7 are also rejected under 35 U.S.C. 103(a) as being unpatentable over the prior art as applied to claims 1-3, 6, and 7 in paragraph 8 above, and further in view of U.S. Patent No. 5,133,788 to Backus. The prior art, as described above in paragraph 8, discloses an air filtration apparatus substantially as claimed with the possible exception of a portable housing. However, Backus (note Figures 1-3, ref. num. 68, and col. 4, lines 10-18) teaches the well-known use of a portable housing in an electric air filtration apparatus for the purpose of ensuring

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maximum household use and for this same reason it would have been obvious to one of ordinary skill in the art to employ such an expedient in the Rittri et al and Jorder et al air filtration system.

10. Claims 4, 5, and 20, 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over the prior art as applied to claims 3 and 19 respectively above, and further in view of U.S. Patent No. 5,474,600 to Volodina et al. The prior art, as described above in any one of paragraphs 6, 8, or 9, discloses an air filtration system substantially as claimed with the apparent exception of hexagonal cells. Volodina et al (note ref. num. 25, Figure 7, and col. 5, lines 28-39) teach the well-known use of hexagonal cells in an air filtration apparatus for the purpose of maximizing ionization and for this same reason it would have been obvious to one of ordinary skill in the art to employ such an expedient in any one of the prior art air filtration systems.

11. Claims 8-10, 12-15, 22, 24-26, and 28-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over the prior art as applied to claims 1 and 17 in paragraphs 6, 8, or 9 above, and further in view of U.S. Patent No. 6,497,754 to Joannou. The prior art as described above discloses an air filtration apparatus substantially as claimed with the possible exception of various different coating applications. In any case, Joannou (note col. 1, line 5 to col. 2, line 9, and col. 3, line 46 to col. 5, line 27) teaches the well-known use of various different conductive coating applications in an air filtration device in order to enhance ionization and for this same reason it would have been obvious to one of ordinary skill in the art to employ such an expedient in any one of the prior art air filtration systems.

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12. Claims 11, and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over the prior art as applied to claims 9 and 25 in paragraph 11 above, and further in view of U.S. Patent No. 4,750,921 to Sugita et al. The prior art as described above in paragraph 11 discloses an air filtration apparatus substantially as claimed with the possible exception of a perpendicular coating pattern. However, Sugita et al (note ref. num. 24, Figs. 3-5, and col. 2, lines 43-54) teach this well-known expedient in an air filtration device for the purpose of enhancing conductivity and for this same reason it would have been obvious to one of ordinary skill in the art to employ this expedient in the prior art air filtration system.

13. Claims 16, and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over the prior art as applied to claims 1 and 17 in paragraphs 6, 8, or 9 above, and further in view of U.S. Patent No. 4,509,958 to Masuda et al. The prior art as described above discloses an air filtration apparatus substantially as claimed with the apparent exception of flat sheets between corrugated filter material. However, Masuda et al (note Figures 1-4, ref. num. 6,7, and col. 1, lines 27-58) teach the well-known use of flat sheets between corrugated filter material in an air filtration apparatus for the purpose of reducing clogging and for this same reason it would have been obvious to one of ordinary skill in the art to employ such an expedient in any one of the prior art air filtration devices.

Conclusion

14. The prior art made of record and not relied upon is considered pertinent to applicants' disclosure. These references have been cited as art of interest to show other air filtration systems.

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15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Richard L. Chiesa whose telephone number is (571) 272-1154.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Duane S. Smith, can be reached at (571) 272-1166.

Any inquiry of a general nature or relating to the status of this application should be directed to the Technology Center 1700 receptionist whose telephone number is (571) 272-0987.

Facsimile correspondence must be transmitted through (703) 872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Richard L. Chiesa
March 17, 2005

Richard L. Chiesa

**RICHARD L. CHIESA
PRIMARY EXAMINER
ART UNIT 1724**

March 17, 2005